

Kalamazoo

TILE AND WOOD

SILOS

"The World's Standard"



FEB 9 - 1919

KALAMAZOO
TANK & SILO CO.
KALAMAZOO ~ MICH.

Manufacturers Of

Kalamazoo

TILE AND WOOD
SILOS

"The World's Standard"



also Manufacturers Of

Kalamazoo Feed and Ensilage Cutters

Kalamazoo Steel and Wood Tanks

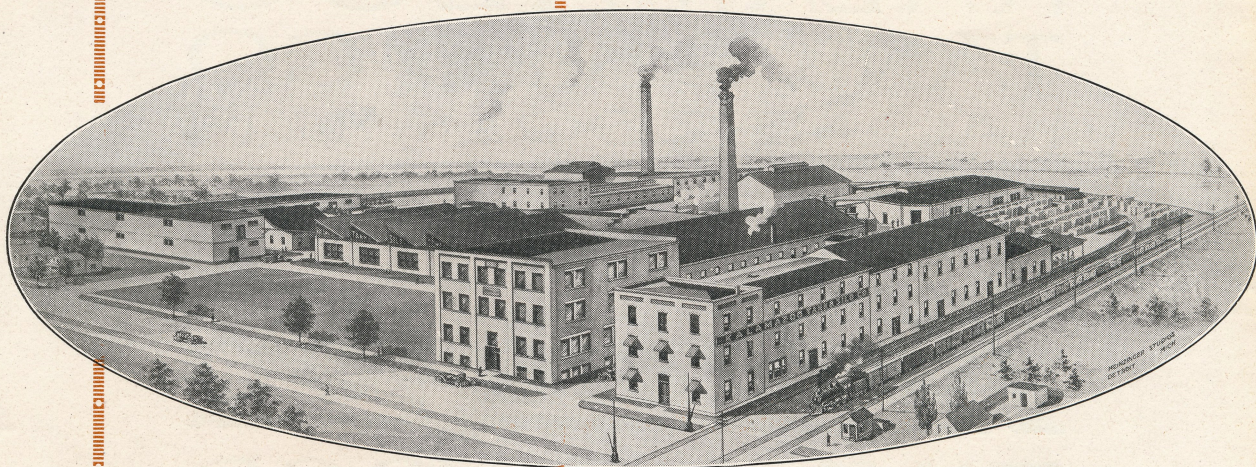
Wood and Steel Wind Mills

Cattle Stanchions

Special Catalogs on Request

Home of the Kalamazoo Tank and Silo Company

KALAMAZOO, MICH.



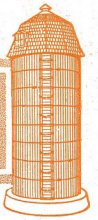
THE largest and most complete modern factory of its kind, fully equipped with the latest machinery for the exclusive manufacture of Silos, Silo Roofs, Silo Fillers, Wood and Steel Tanks, Wood and Steel Wind Mills.

The Kalamazoo plant is not a part factory and part assembling plant but is a *complete* factory. It includes an up-to-date Foundry and Galvanizing Plant. Here Kalamazoo Silos are built "from the ground up"—that is why every part is right and will *save you money*.

This plant has been running since 1873 without a shut-down except for repairs.



Kalamazoo Tile and Wood Silos



By Way of Introduction

BEFORE going into details about Kalamazoo Silos we want to call your attention to our history and experience in silo building. The first patent on silo construction issued by the U. S. Patent Office was given to this company.

The president of the company, Mr. Homer Manvel could be rightly called "the father of the silo." Kalamazoo Silos, today known as "*The World's Standard*," are the outgrowth of Mr. Manvel's ceaseless study and untiring effort to give to the world the means of making the feeding of cattle more economical, practical and satisfactory. Thus came the silo which is now recognized as one of the stock feeder's greatest assets.



MR. HOMER MANVEL
"Father of the Silo Business" of America

Twenty-seven years ago this company began to build silos and the first ones built are still in use, practically as serviceable as when first erected. Every one of them has repaid its cost many times over. Surely we could not wish for a better endorsement of Kalamazoo Silos. What other company can show such a record?

Kalamazoo Tile and Wood Silos, known as "*The World's Standard*," have rightly earned this recognition, not only because of their superior features and unsurpassed quality, but because of the policy of fair and straightforward dealing which has always characterized the business of this company.

We know that every farmer ought to have a silo and believe every one who buys a silo ought to select a Kalamazoo. Furthermore, we will *help you get a silo*. If you need a silo and are short of ready money, we will arrange terms that anyone can easily meet.

On the following pages we tell you *why* Kalamazoo Silos give you the utmost value and service for your money.

We want you to read and study this catalog with the understanding that our claims for Kalamazoo Silos are fully supported by the thousands of successful farmers who have used them for years and are therefore most competent to judge.

We believe in fair dealing and co-operation. We give you a *quality* product at the *right price*; not only that but we will go the limit to co-operate with you in determining the right size and style of silo for your purpose.

Yours for food conservation,

HOMER MANVEL, President.

Kalamazoo Tank and Silo Co.



Kalamazoo Tile and Wood Silos



Kalamazoo Glazed Tile Silos

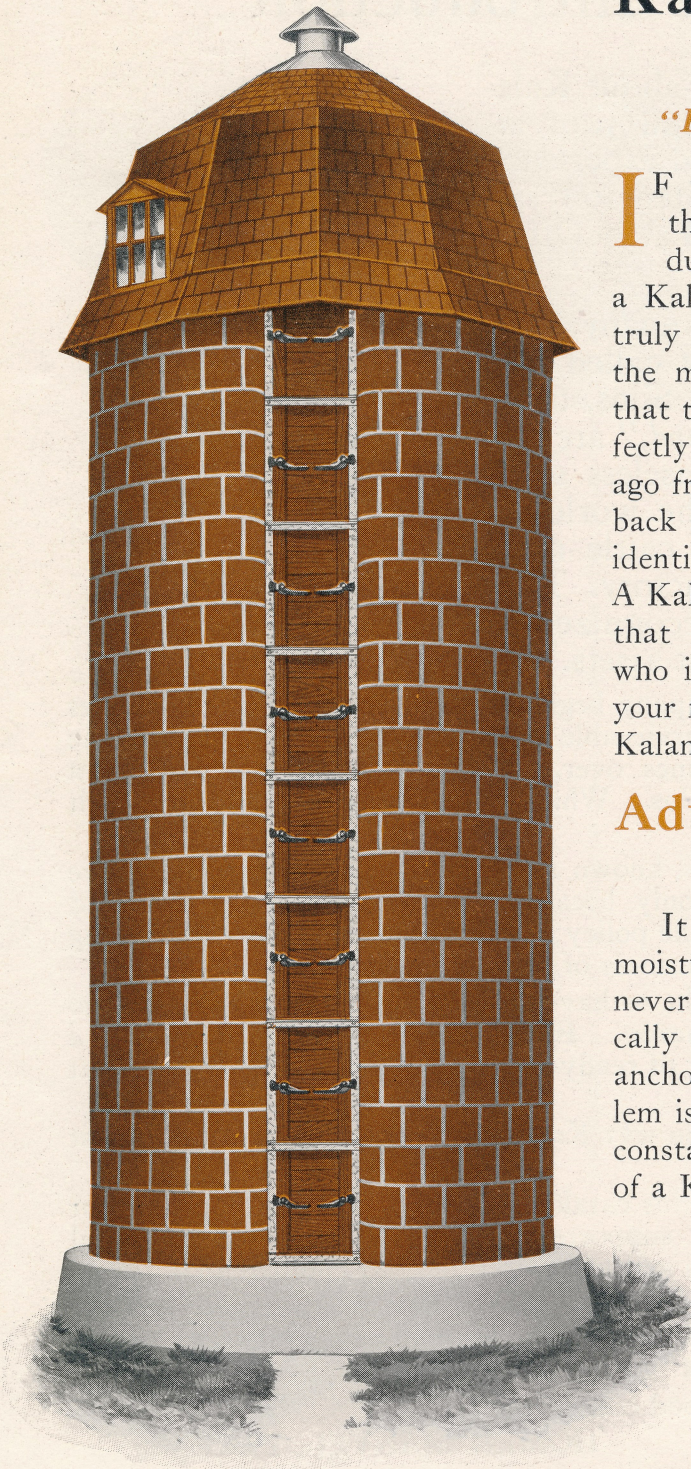
“Permanent as the Pyramids”

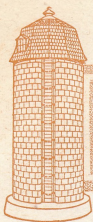
IF you want absolutely the best silo—the most attractive, most efficient, most durable silo that money can buy, choose a Kalamazoo Glazed Tile Silo. They are truly as “Permanent as the Pyramids” for the materials are of such lasting quality that they can be said to last forever. Perfectly legible historical tablets, made ages ago from similar quality of glazed tile, date back so far that all traces of time and the identity of the producers have been lost. A Kalamazoo Silo will outlast your life and that of your children’s children. Those who inherit your acres will thank you for your forethought and wisdom in building a Kalamazoo.

Advantages of the Glazed Tile Silo

It is fire-proof, frost-proof, storm-proof, moisture-proof, acid-proof, decay-proof—never needs painting, and repairs are practically unknown. Its weight makes it self-anchoring. Once erected, your silo problem is solved forever. A hundred years of constant use will not impair the efficiency of a Kalamazoo Glazed Tile Silo.

The Blocks are of special design, having three air spaces, and with the mortar make an air-tight joint. Anyone familiar with cement work can easily do the job of erecting a Kalamazoo Glazed Tile Silo in a short time.





Kalamazoo Tile and Wood Silos



Construction

The walls are made of hollow tile blocks, thoroughly glazed to make them absolutely *moisture-proof*. These blocks have three dead air spaces, which afford complete protection, keeping the contents of the silo warm in winter and cool in summer. In other words, silage cannot freeze in zero weather nor overheat in the hottest days of summer. Even temperature of contents is insured during fermentation—a very valuable and important consideration. The silage will keep in *perfect* condition indefinitely.

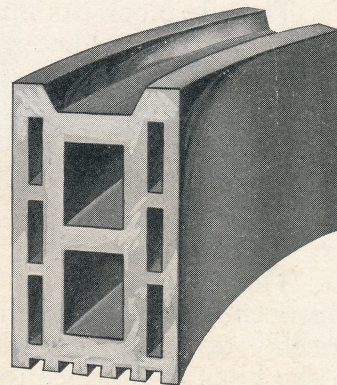
The blocks are 12 in. long, 10 in. high and 6 in. thick and are so constructed as to give plenty of room for hoops to lie flat imbedded in concrete between the blocks entirely out of sight and protected against exposure to the air. These blocks are made by forcing the clay through heavy steel dies giving a perfect curve so that the silo is smooth and symmetrical inside and outside.

Note the construction of the main blocks of the silo. They form a double wall, the mortar forming a tongue and “keying” the blocks together. This, with the Kalamazoo system of reinforcing, makes the strongest kind of joint known.

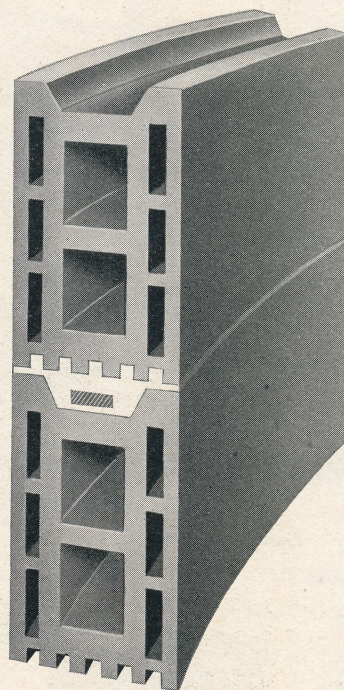
Kalamazoo Tile Silos are strongly reinforced with flat galvanized steel hoops properly curved to lie flat in the cemented groove at the top of every third tier of blocks, giving ample strength to resist any possible silage pressure.

These hoops are run in front of our galvanized steel door frame 30 inches apart, holding it securely in position. See illustration page 6.

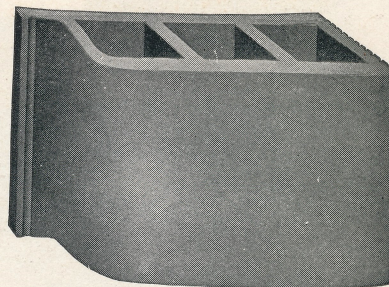
The door jamb blocks are made from special dies in two sizes to provide for breaking joints evenly, and in this construction it will be observed that the door jamb is reinforced, vertically (see illustrations page 6) by a steel angle galvanized bar, with a cross bar of same material at intervals of 30 inches. Either the standard door or the hinged door may be used. See illustrations and descriptions of doors on page 13.



Main Wall Block



Showing the inter-locking mortar joint between layers of tile



Door Jamb Block



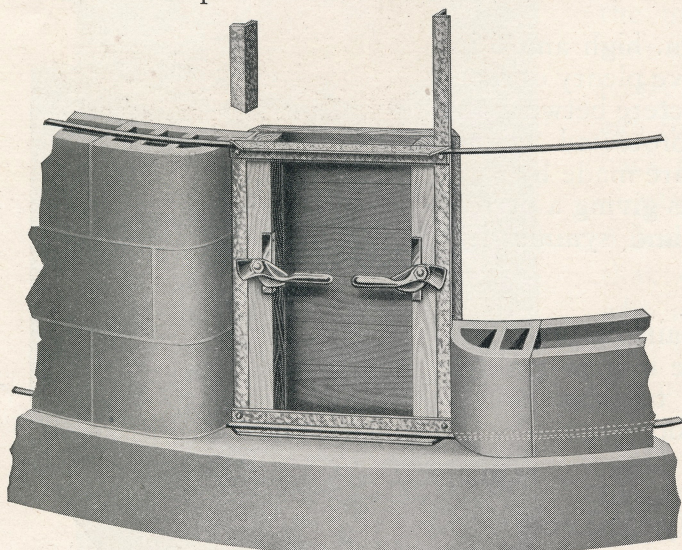
***Kalamazoo* Tile and Wood Silos**



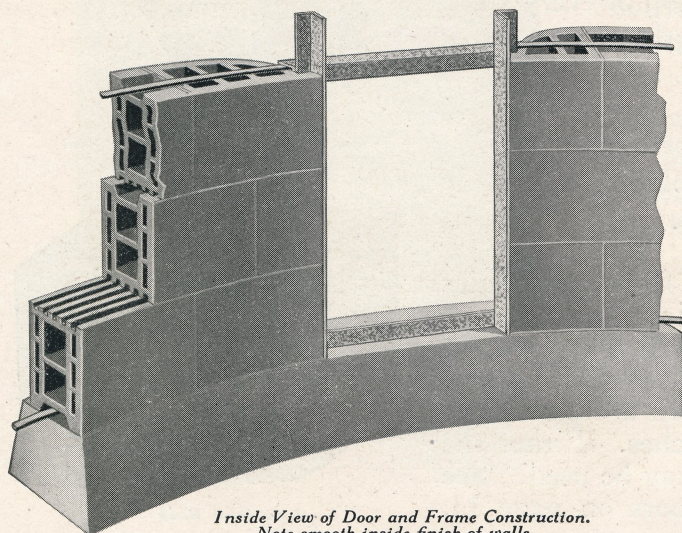
The tile block fits into and is held in place in the angle of the door frame by the galvanized steel hoop, which extends around the silo and immediately under the ledge of the galvanized angle cross bar just above and below each door space as shown in illustration below. These door jamb blocks are cut on a curve as the outer wall curves outward from the vertical door frame, giving the opening a finished and attractive appearance.

Superior Quality Tile

The material used in the manufacture of Kalamazoo Glazed Tile is of peculiar consistency and is found only in a few localities. It must contain a percentage of fire clay, otherwise it would not stand up under the intense heat that must be carried in the kilns to produce the glazed finish. Anything less than a salt glaze will not meet the requirements of Kalamazoo Silos.



Front View of Tile Silo showing how the steel hoops support the door frame and hold it securely in place



*Inside View of Door and Frame Construction.
Note smooth inside finish of walls.*

We have tried out many other materials that make fine looking blocks, but careful tests proved that they would absorb a percentage of moisture from the silage which would mean a certain amount of damaged or spoiled silage next to the inside of the wall, and therefore they had to be rejected. The tile we furnish is absolutely fire-proof, frost-proof and moisture-proof.

Convenient Shipping Points Save You Money

Instead of manufacturing all our tile here in Kalamazoo and thereby necessitating long freight hauls in many cases, we simply make the dies and templates and have the tile furnished by a string of kilns located at various points throughout the country where the special clay required can be found.

Thus a customer in Iowa, Nebraska, Kansas or other distant state is not compelled to pay freight all the way from Kalamazoo, but merely a short haul from our nearest kiln. We aim to furnish the best silos in the world at the lowest possible cost consistent with quality.



Kalamazoo **Tile and Wood** Silos



We Furnish Everything But the Foundation

We furnish the tile for any size silo. We furnish the galvanized steel door frames, doors, roof, ladder, chute and such equipment as you may select. The price varies according to the size and with the amount of equipment ordered. Instructions for erecting as well as plans for the foundation are furnished with each silo.

The only part we do not furnish is the foundation—this is an important part of the construction. In order to insure permanence and safety it should be very solid, preferably of concrete. The Kalamazoo Erecting Derrick will simplify the erection and will save time and money. See page 17.

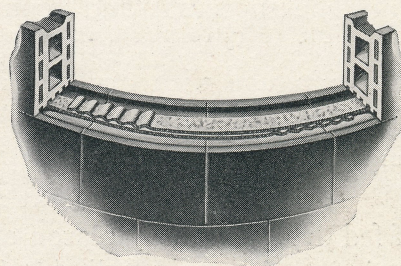
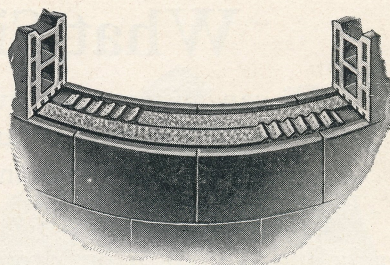
Bolts for fastening the chute are supplied from factory. These should be placed in the mortar joint between the rows of blocks as the silo is being built, 5 feet apart in a vertical line, so that a 2x4 can be bolted over them.

At the top of the silo a hoop is imbedded in mortar filling the groove flush. A double wooden segment curved to fit the silo, is included with each silo. This covers the top layer of tile and makes a firm anchorage for the roof. See illustration below.

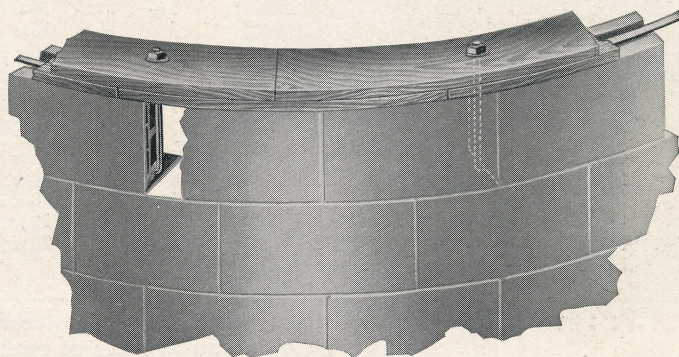
Kalamazoo Glazed Tile Silos are guaranteed for three years—but three years does not indicate their life by any means. If properly erected, a Kalamazoo Glazed Tile Silo should last several generations.

Tile silos are always shipped in car load lots and it is greatly to the customer's advantage to buy early in the winter so that the tile can be handled when teams are not busy and time is plentiful.

The blocks can be stored outside ready for use as they are not affected by the weather.

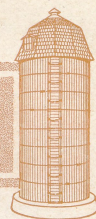


Showing how the Galvanized Steel Hoops overlap in the Tile Silo. Either way there is a lap of about 20 inches—never less than 15 inches.





Kalamazoo Tile and Wood Silos



selected lumber in our own yards and elsewhere, therefore we can make delivery promptly at all seasons of the year.

Kalamazoo Stave Silos are *built right*. They are *attractive* and *durable*. They are *priced right*. They represent the best that careful study and *experience covering a period of 27 years* can produce.

Kalamazoo Stave Silos are shipped ready to set up. Not a nail or screw required for the silo. Easily and quickly erected. Cost varies with size of silo and kind of wood used. Refer to page 8 to determine size needed.

In selecting a wood stave silo it is well to bear in mind that the best is invariably the cheapest in the long run. For this reason, we usually recommend our California Redwood Stave Silos. However, either of the other woods will give many years of service and will prove eminently satisfactory, price considered.

Four Kinds of Wood

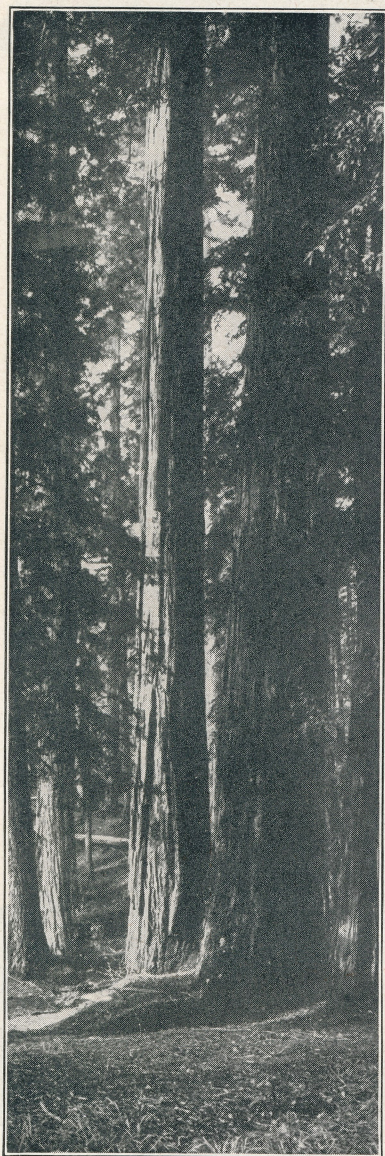
We carry at all times a large stock of silo lumber consisting of California Redwood, Tamarack, Washington Fir and Larch.

California Redwood is a wood that will practically last for all time, a timber pronounced by eminent chemists as being absolutely without the fungi which produces decay. Redwood trees grow to an immense size—evidence of durability—also insurance of clear, straight staves free from knots and imperfections. The wood is without sap or imperfection of any kind, and in buying a silo of this material you get the best that money can buy. When you order from us you get the genuine California Redwood, as we always carry a large stock of this wood in our yards to take care of the steady demand for this kind of silo.

Washington Fir is very extensively used in silo construction, due in a large measure to its lasting qualities and the fact that it does not absorb much moisture, being a close grained wood. Next to Redwood this is the best silo wood. Our specifications are special, and of a higher grade than the common "silo grade," insuring you a fir silo which is practically "clear" stock. We specify ninety percent to be clear stock, insuring you the closest approach to a perfect silo stave. We use only the old growth Washington Yellow Fir, which is a soft, fine-grained timber and should not be confused with the Oregon Red Fir, which is coarser grained and not so durable.

Tamarack is a native timber of Michigan and Wisconsin, and can be furnished only in a sound knotted tank grade. On account of low freight rates from the mills this can be furnished at less cost than Fir or Redwood. It is considered much more durable than Yellow Pine or Hemlock, and after more than twenty years' experience in using this wood in our tanks and silos we take pleasure in recommending it to our friends who do not select either of the above woods.

Larch is a native timber of the northwestern states, and corresponds very closely to tamarack, both in appearance and durability. Can be furnished only in a sound knotted grade, and recommended to those who want a silo at a moderate cost.



Giant California Redwoods



Kalamazoo Tile and Wood Silos



Anchor System

A complete anchor system is furnished with every Kalamazoo Stave Silo. Each system includes three galvanized cables with heavy ground rods and "take up" devices and three substantial base anchors.

When properly installed according to our instructions furnished with each silo, we guarantee every Kalamazoo Silo to hold through any storm which does not destroy surrounding buildings.

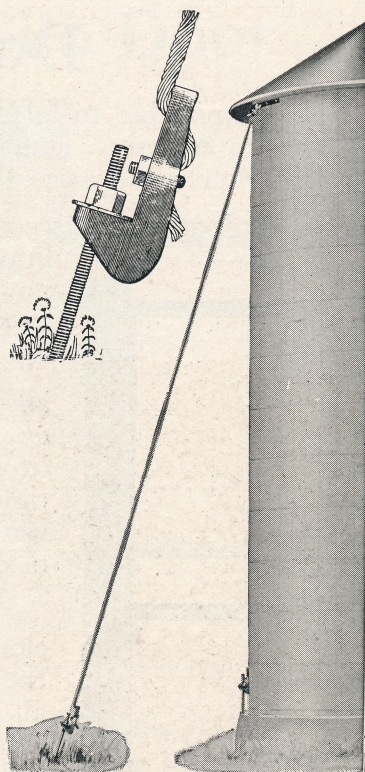
Hoops

In a silo the hoops are very important as they supply the element of the building's rigidity.

The best grade of steel is used in making Kalamazoo hoops. They are rolled from billets and curved to the proper circle to fit each individual silo and have long threads to permit of tightening. Malleable iron adjustable draw lugs with hexagon nuts serve to give the best and safest construction.

A silo hoop wrench which is made especially for Kalamazoo hoops and which will save you considerable time while building your silo, is furnished with each silo. It gives you a full half turn of the nut instead of a quarter turn.

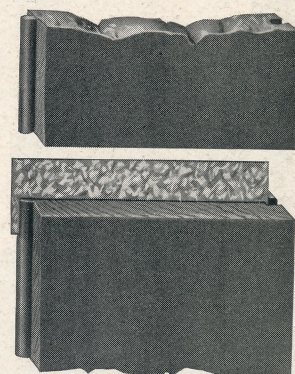
The Roof for any Kalamazoo Wood Silo may be one of the superior types of roof furnished by us or it may be built of any other satisfactory material. See pages 14 and 15 for details of roofs. Our price does not include roof unless so specified.



Anchors and Guy Wires

Splines

In a two-piece stave silo, splines are an important feature to prevent the opening up of the end joint. See illustration at right. These galvanized splines give 2 inches lap and are absolutely air tight. No possible shrinking of staves can open these joints. Being galvanized they are rust-proof. Our agent will gladly submit this spline joint to you for your inspection.



Kalamazoo Galvanized Steel Spline

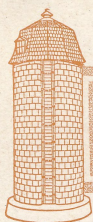
No. Crystal Lake, Ill., Jan. 9, 1913.
Kalamazoo Tank and Silo Co.,
Kalamazoo, Mich.,

Dear Sirs:—Our experience with the silo I bought of you in the fall of 1911 is as follows: I am so well pleased with this Silo—it is a Redwood, 18x36 two piece—that I thought I must have another last fall, 1912. It is an Oregon Fir. In setting up they both went together like a barrel, and so far as my knowledge of such things goes, are as perfect as a silo can be, and I would not feel that I was treating myself fairly if I should buy any other kind of silo.

Respectfully yours,
W. J. KITTLE.



Kalamazoo Malleable Iron Lug, made for our own use, showing the long threads. The lug is made so the nut is raised up from the stave, so it does not bind or rub against the silo when turning the nut.



Kalamazoo Tile and Wood Silos



Doors and Frames

IT is impossible to adequately describe Kalamazoo door frame and door construction here. This is an exclusive feature of Kalamazoo Silos which alone has won well deserved preference among the thousands of silo owners.

The door frame is constructed of heavy angle steel carefully riveted and reinforced then galvanized, leaving no raw surfaces or edges exposed to rust.

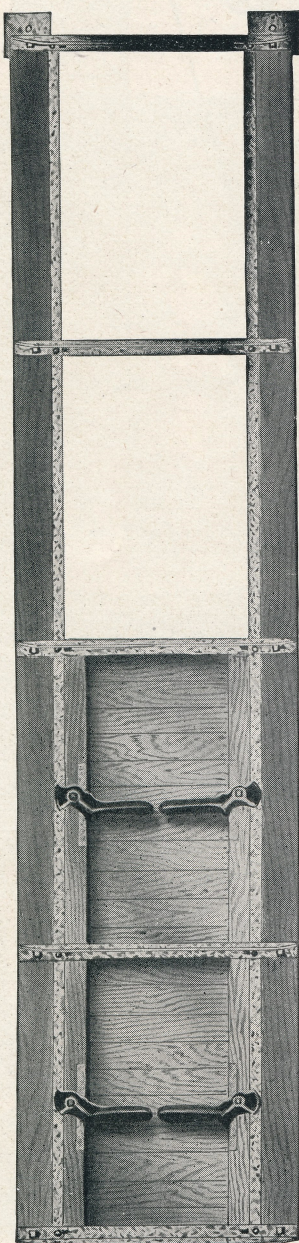
A continuous series of doors seals in position — airtight — against a *wool-felt gasket*, by means of malleable iron cam latches which draw the door tight against the door frame and silo wall. See illustration at bottom of next page.

The inside of the doors when closed forms a surface as smooth as the inside of the silo walls, removing all danger of interference with silage settling evenly. See illustration at right. The doors cannot bind and the juices cannot come in contact with the steel frame or hoops.

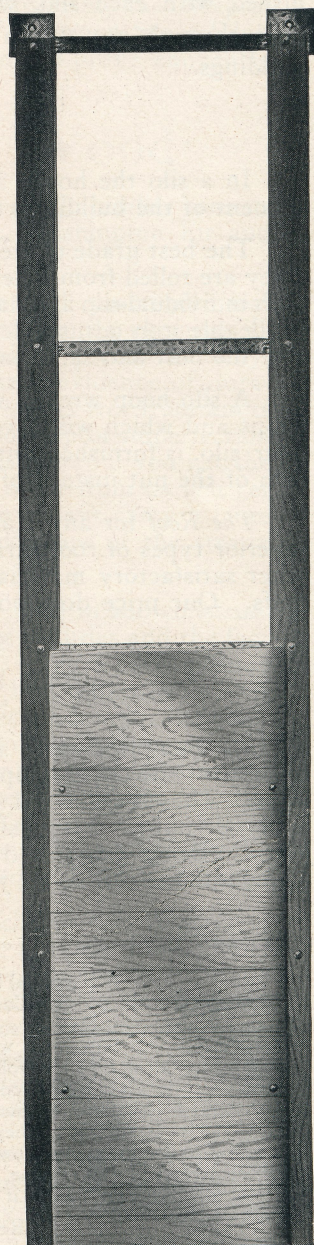
In the stave silo each side of the frame is bolted to a stave and the frame becomes rigid as part of the complete hooped wall.

In the tile silo the door jamb blocks from our special dies are formed to fit the steel angle door frame which is held securely in position by steel reinforcing rods running in front of the frame every 30 inches or third tier of blocks.

Galvanized angle cross bars, together with the cam latches, make a convenient ladder. Door frames are made in 10-ft. sections. We have devoted much time to the study of doors and door frames for silos, because they determine to a large extent the success or failure of your silo.



As the Kalamazoo Doors and Frame
Look from Outside of Silo



As the Doors Look from Inside
of Silo



Kalamazoo Tile and Wood Silos



Kalamazoo Hinged Silo Door

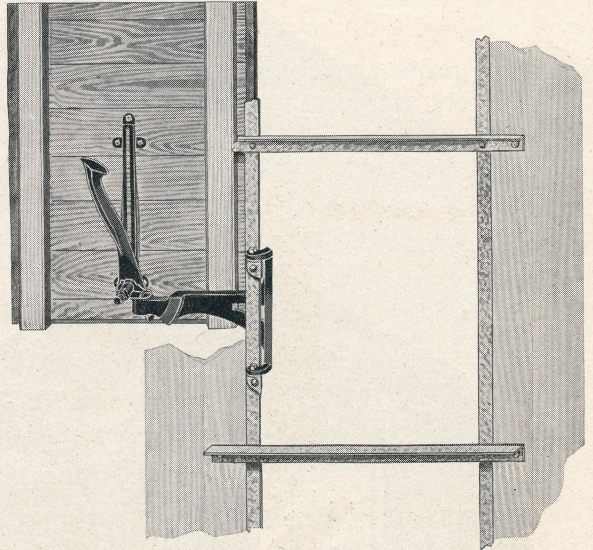
THIS is an exclusive feature furnished with our silos at small additional cost, if desired. It is so hinged that it permits of being raised half of the height of the door when opening. See illustration at right. Each door rests on an elbow and automatically adjusts itself. Can't sag.

The hinged door is always in position—cannot be thrown around, exposing it to destructive elements or to damage by careless handling.

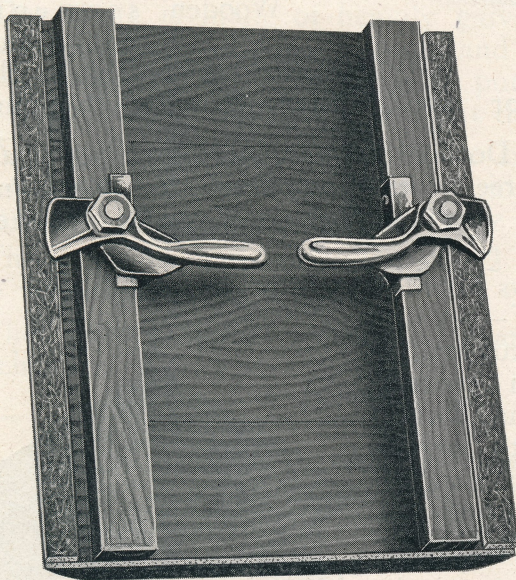
As shown in illustration at right the door can be raised 15 inches vertically before swinging around, thus avoiding the removal of ensilage in order to swing it open.

All irons are malleable and can be used as the rungs of a ladder, 15 inches apart.

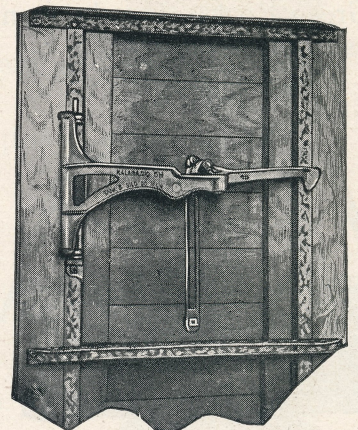
Illustrations show salient features in the jointed hinge which performs the same office that our standard interchangeable doors do with their malleable iron cam latches in sealing the door air-tight. No matter whether you select the hinged door or the standard interchangeable Kalamazoo door, you are assured of a safe, tight-locking, air-proof door, perfectly smooth on the inside to insure even and unhindered settling of the ensilage.



Kalamazoo Hinged Silo Door in Open Position



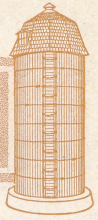
Kalamazoo Removable Door—Regularly Furnished with Kalamazoo Tile or Wood Silos Unless Hinged Doors are Specified. These Doors Lock Tightly against the Steel Frame like the Hinged Door, Sealing the Door Air-Tight.



Kalamazoo Hinged Silo Door—Closed



Kalamazoo Tile and Wood Silos



Kalamazoo Silo Roofs and Roof Frames

SILO roofs are not included in our price for silos due to the fact that many buyers attempt to build the roof according to their own plan. We build better roofs and can sell the complete roof for less than the farmer's cost of materials.

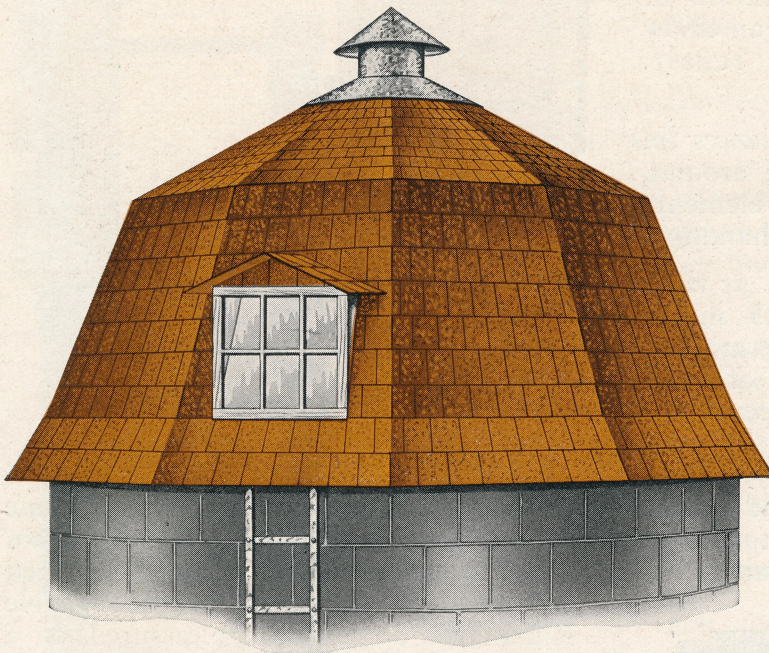


FIG. 1

top of tile silos to form a foundation for nailing the rafters for the roof.

Fig. 1 shows Michigan hip roof with Dormer window, with covering of asphalt shingles. Shingles are furnished in three colors—Gray Rock, Red Rock and Green Rock. Can be furnished complete as shown, or *frame only* can be furnished as shown in fig. 2.

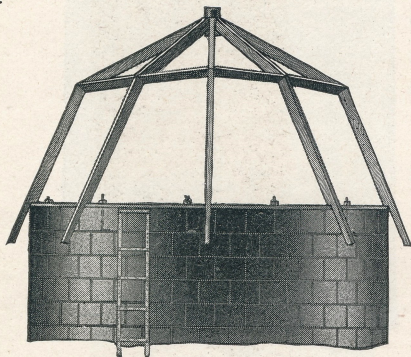


FIG. 2

Fig. 2 shows Michigan hip roof—*frame only*. Rafters cut ready to use, with center block. You may have the boards to cover and then use some good commercial roofing to make roof complete.

Fig. 3 shows conical board roof with Dormer window. This roof

Kalamazoo silo roofs are built in several styles to satisfy every demand. All our roofs are self-supporting, that is, they have no cross pieces to interfere with filling to the very peak.

Solid, substantial rafters form the body of Kalamazoo roofs. We will furnish the complete roof, or the *frame only*, when so ordered, with complete instructions for covering with boards and roofing material.

Wooden segments made up of two 1-inch boards are bolted to the

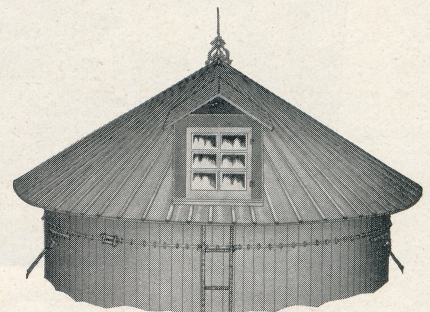
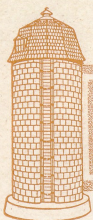


FIG. 3



Kalamazoo Tile and Wood Silos



is furnished complete with self-supporting rafters covered with 1-inch cypress boards, cut wedge shape, and centering around a turned post at the peak.

The boards are grooved near the edges and cracks are battened to make them water-tight. Dormer window with hinged sash included.

Fig. 4 shows conical roof complete with manhole and trap door. There is a rafter for each 1 foot of diameter

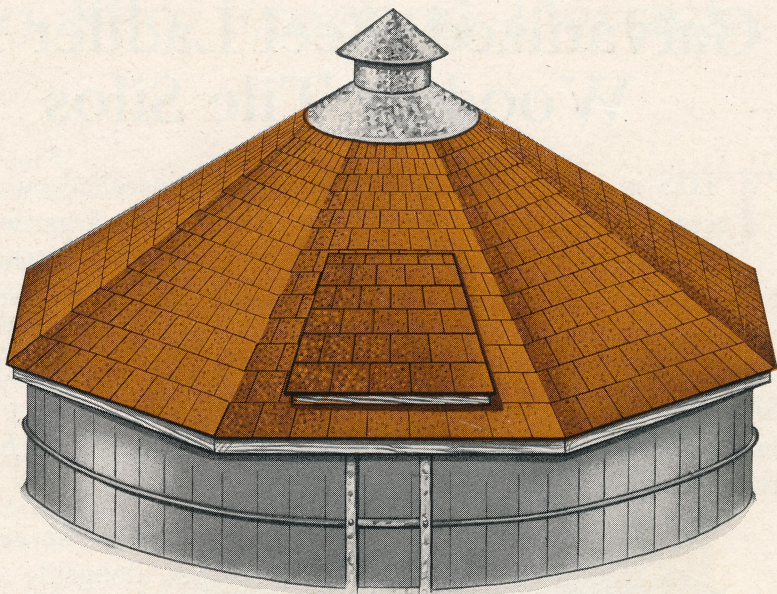


FIG. 4

of silo and boards are cut to fit and shipped in a bundle, complete for each panel. This roof can be covered with asphalt shingles if desired or the frame with board covering only may be used. Frame only furnished if desired.

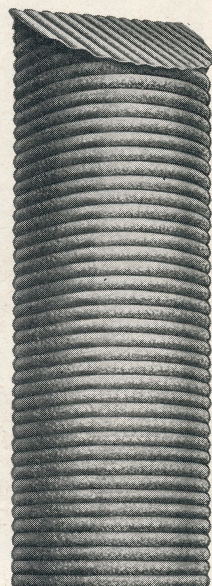
Galvanized Steel Silo Chute for Tile or Wood Silos

This chute is made of heavily galvanized corrugated steel and is 34 inches in diameter. Made in 2-foot sections and may be put on any kind of silo. The sections are shipped curved ready to put in place and the simplicity of placing and fastening make it the universal chute.

We supply bolts for fastening a 2x4 on each side of the door frame of our Tile Silos on the outside of which the chute is to be nailed.

The sheets have deep corrugations 2 inches apart, making them very rigid.

They have a better appearance than wood, are fire-proof and cheaper.



Paid for Itself First Season

"As a saving proposition in feed, my first silo, which cost me, set up, in round figures \$600, saved us in hay alone something over \$800, thus more than paying for itself the first season. But this is not all as there was a saving in grain also. We did not increase our flow of milk very much, but I feel that we were to blame for that in our handling of our cows.

"The above figures, as to saving, I can verify to anyone wishing me to, as I have them in black and white in my books."

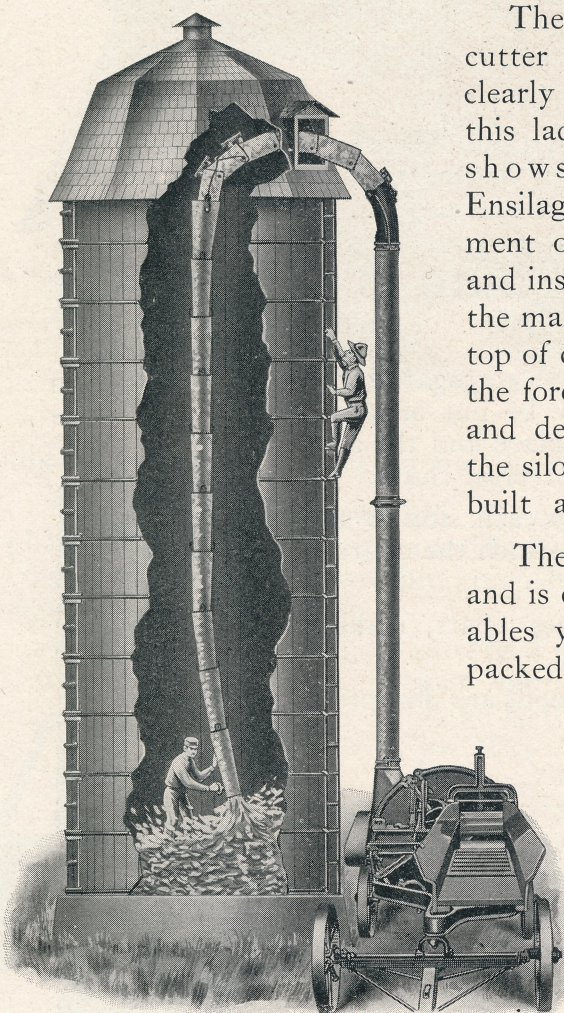


Kalamazoo Tile and Wood Silos



Galvanized Steel Ladder for Wood or Tile Silos

THIS is extra equipment that may be installed on any silo, stave or tile, although on tile silos the brackets (which are furnished with ladder) should be placed when the silo is being built. This ladder is inexpensive and very handy. It gives you a permanent ladder, one always in place, and an easy access to the opening in the silo roof, for placing the filler pipe. Should the pipe clog in filling, this ladder makes any part of it immediately accessible and may save its cost in one filling by the saving in time of men and teams.

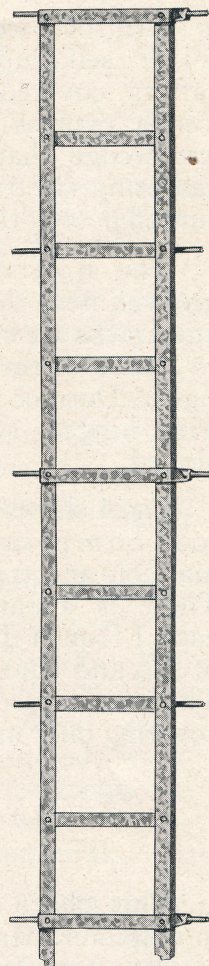


The illustration at left with cutter placed alongside the silo clearly shows the great value of this ladder. This illustration also shows a Kalamazoo Shear-Cut Ensilage Cutter with full equipment of outside conductor pipe and inside distributor pipe. Note the malleable iron deflector at the top of conductor pipe, which takes the force of the stream of ensilage and deflects it around and into the silo. This deflector is heavily built and will last indefinitely.

The distributor pipe comes in $2\frac{1}{2}$ -foot sections, and is easily detached, as the silo fills up. It enables you to fill your silo evenly, insuring better packed silage and even settlement.

The name Kalamazoo stands for everything best in the way of modern equipment for cutting and storing ensilage in perfect shape.

A Kalamazoo Cutter and equipment is an appropriate companion for every Kalamazoo Silo. Ask our representative when he calls, or write direct to factory.



10 ft. section of Kalamazoo Galvanized Steel Ladder



***Kalamazoo* Tile and Wood Silos**

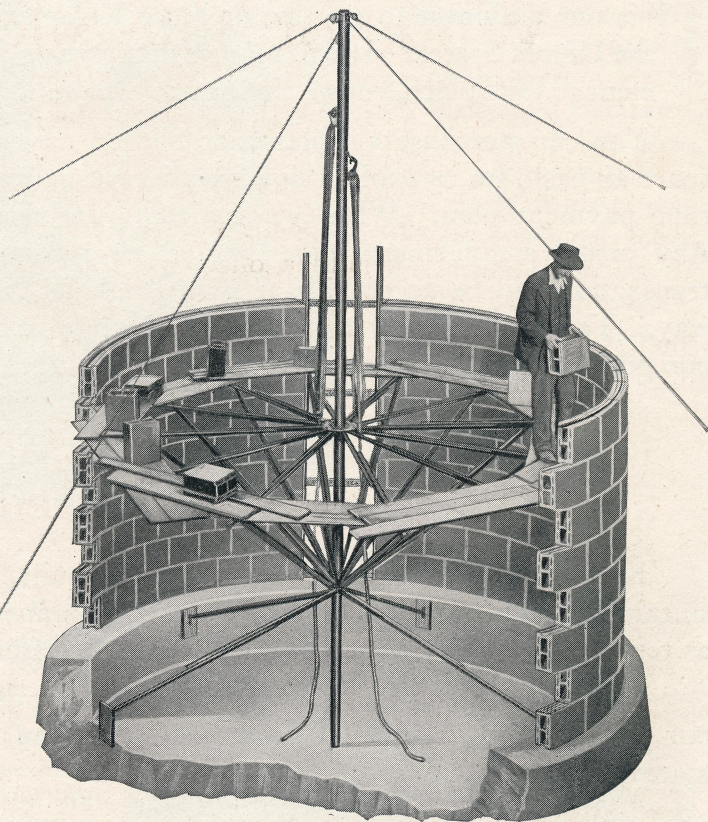


Kalamazoo Silo Erecting Derrick

THIS ready-to-use derrick practically saves its cost in the erection of each large silo. Can be adjusted for all sizes of silos between 10 feet and 16 feet in diameter, and the platform can be raised or lowered by tackle block at the convenience of the workmen. Its construction consists of a heavy steel pipe or center pole, structural steel arms and malleable iron collars and splice bars, heavy enough to withstand the strain.

It can be quickly put up, taken down and moved from one job to the next. Contrast this to regular scaffolding which requires building and tearing down each time it is used.

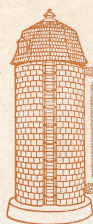
Write us or ask our representative in your locality for further details.



Buy Early in the Season—Save Time and Money

We offer extra inducements and special service to early-in-the-season buyers. It is to your advantage to have your silo materials laid down at your farm early, so that you can use spare days in erecting the silo. Railroad conditions, too, make early buying imperative, therefore to avoid congestion of last-minute orders at our factory and to facilitate good service to our customers, we offer special inducements to early buyers. Our representative will gladly discuss this point with you or full details will be furnished if you write direct to factory.

We wish it were possible for you to come to our factory where you could see the manner in which we are equipped to handle your order, and could watch every step in the construction of your silo and note the care and attention that is given even to each minor detail of this work. You would then realize that KALAMAZOO means QUALITY, and as the silo is long past the experimental stage and now classed as a permanent improvement, in fact, the best paying investment ever put on the farm, you should seriously consider both material and construction of Kalamazoo Silos when making your selection.



Kalamazoo **Tile and Wood Silos**



Your Terms Are Our Terms

IT is our ambition to see one or more Kalamazoo Silos on every good farm in the United States. It will require many years for this great economic improvement to take place, yet we want to do everything in our power to hasten that day.

You can purchase a Kalamazoo Silo on any reasonable terms. If you can't spare all cash, let us explain how easy it will be to own a Kalamazoo on our long-time payment plan. When we say that *your* terms are *our* terms, we mean it. Any credit arrangement which would be recognized in any ordinary business transaction will be acceptable to us. Don't let lack of ready cash stand in your way. You need a Kalamazoo Silo—we want you to have it—and we will do all in our power to help you get one.

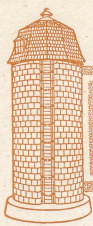
Every Kalamazoo Silo is Fully Guaranteed

Kalamazoo Wood and Tile Silos are built of carefully selected materials suitable for the purposes intended. We guarantee our materials to be exactly as represented, to be of proper quality and free from defects.

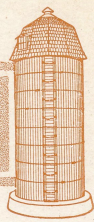
We have built up our large business on fair dealing and co-operation—this is our policy today and we are financially able and morally willing to back up our statements to the limit.



Winter Scene, Farm of E. E. Traphagen & Sons, Linden, Mich. 41 Head of Cattle, 600 Lambs marketed. Silage fed. How much hay did he save? Ask him.



Kalamazoo Tile and Wood Silos



Kalamazoo All the Way Through

These 22x45 twin Glazed Tile Silos, shown at left, are on the farm of Mr. R. M. Whitehead, Cranberry, Texas, who builds thoroughly and permanently. Note the Michigan galvanized hip roofs, galvanized steel ladders running up to the Dormer window. Even the water tank is built of Kalamazoo Glazed Tile.



Admit Kalamazoo is Best

"I am more than pleased with my Kalamazoo Tile Silo. My silage has kept in good condition all winter and my stock are looking fine, although this was a very poor corn year and the feed not what it should have been. I have used but very little grain feed and have wintered 15 head of cattle. My cows have produced more and richer milk and they are all very fond of the silage. Those who have seen this silo generally admit it is the finest silo they have seen."

L. A. LONGWELL.

Schoolcraft, Mich., March 10, 1916.



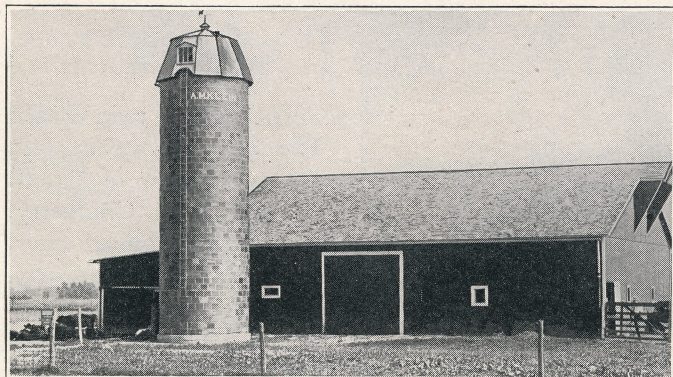
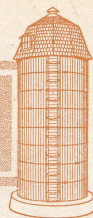
Kalamazoo Stave Silo on Farm of E. W. Kemp, Janesville, Wis.



David G. Maxwell's farm is one of the finest around Waterloo, Iowa. This is evidenced by the character of the stock and the buildings, to say nothing of the two Kalamazoo Tile Silos. There's nothing that can take the place of the silo in successfully and profitably raising cattle—and there's no other silo that equals the Kalamazoo in quality and permanence.



Kalamazoo Tile and Wood Silos



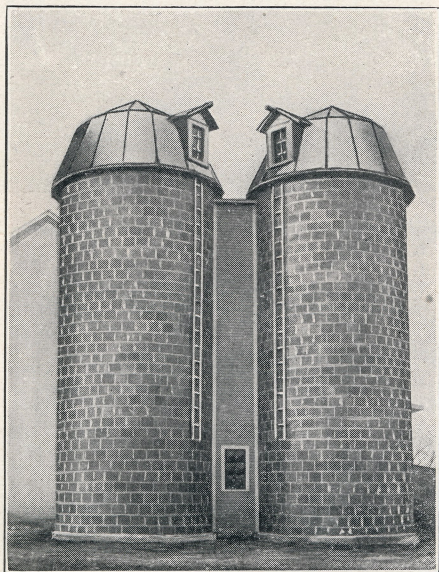
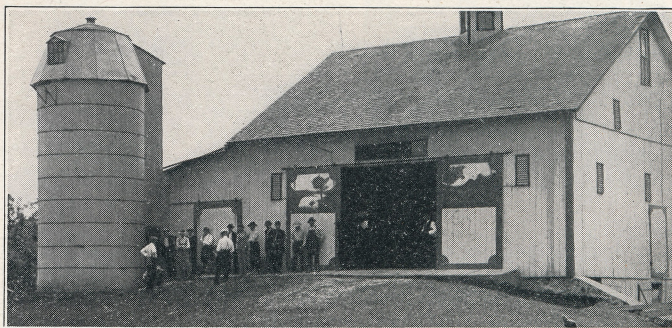
Wants More Kalamazoo Silos

The picture at left shows barn and Kalamazoo Tile Silo on farm owned by Mr. A. M. Klein, Muncie, Ind.

In a recent letter Mr. Klein says: "I point to this piece of work with pride and I find that during the winter all stock thrive on the ensilage and do fine. I would not like to be without my Kalamazoo Silo but would like to have another one just like it, which I hope to have some day."

Popular Everywhere

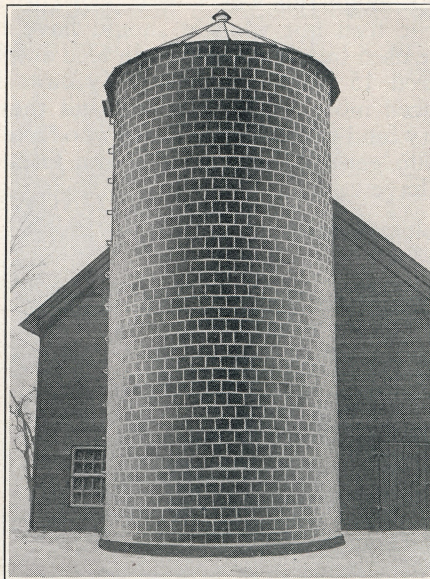
At right we show barn and silo owned by George Thornburg, Muncie, Ind. This is one of many farms inspected during the 1916 Delaware County Silo Tour. The large number of Kalamazoo Silos found on these farms and the highly satisfactory testimonials of their owners are convincing evidence that the Kalamazoo is rightly called "The World's Standard."



These Kalamazoo Twins

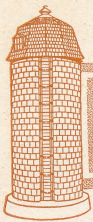
are two of the four Kalamazoo Tile Silos on farm of Mr. Geo. A. Wright, at Grand Isle, Vermont. Mr. E. J. Parker is manager of the farm and writes us that the silos are ideal in every way and that the silage keeps perfectly.

Page Twenty

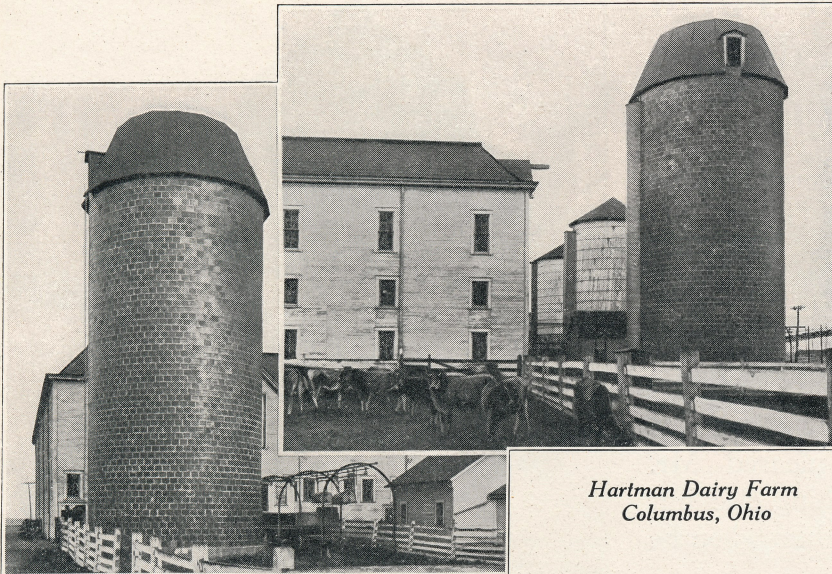


A Large Family

Many farmers have Kalamazoo "twins"—still more have one Kalamazoo Silo, but Mr. L. H. Robbins, McCool, Ind., has a great big family of them—*six tile and four stave*. Mr. Robbins knows good farm equipment.



Kalamazoo Tile and Wood Silos



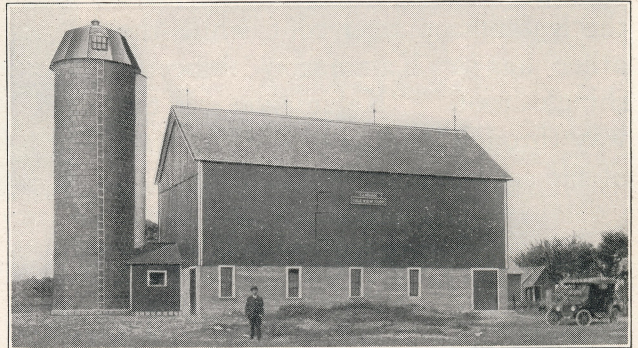
*Hartman Dairy Farm
Columbus, Ohio*

The illustration at left shows two views of the Hartman Dairy Farm, Columbus, Ohio—owned by Mr. F. P. Hartman, the man who made Peruna famous—and was made rich by Peruna. These two Kalamazoo Tile Silos are the latest addition to the Hartman “battery” of silos and are both big fellows—24x50 ft.



A Complete Kalamazoo Outfit

Illustration at right shows barn and Kalamazoo Tile Silo on Yale View Farm, owned by T. J. Minnie, Yale, Mich. Note that this is a complete Kalamazoo outfit—silo, chute, extra ladder and Michigan hip roof—all are products of the Kalamazoo Tank and Silo Co.



Good Stock—Good Silo

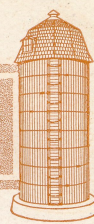
Scene on farm of Eliga Hoppes, Redkey, Ind. Mr. Hoppes believes that the *best* silo is the only kind fit to preserve ensilage for his high-grade stock. It's possible to buy a make-shift silo for less than a Kalamazoo costs—but would you advise any farmer to stock his farm with scrub cows, horses and hogs merely because *they cost less*? Hardly!

Buy thorobreds when you buy stock—and “The World's Standard” when you buy a silo.





Kalamazoo Tile and Wood Silos

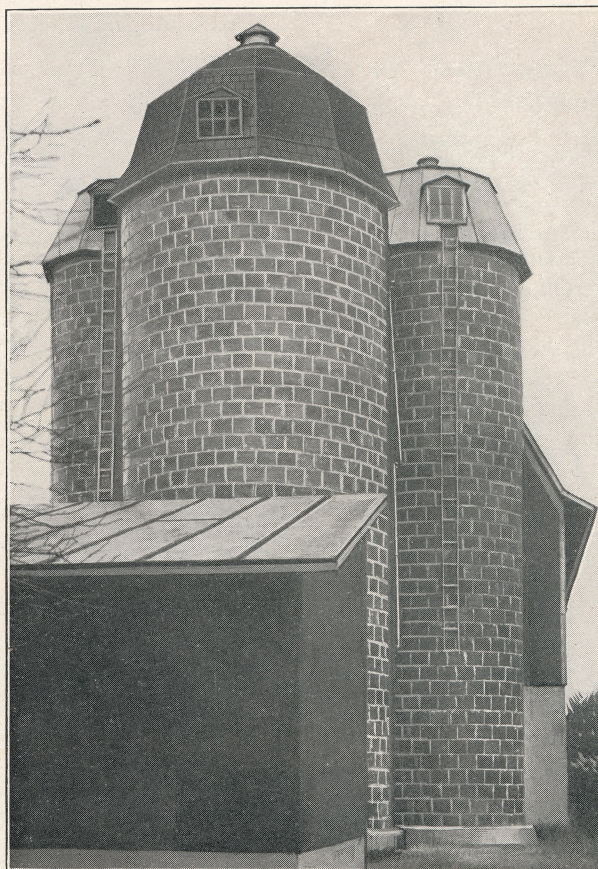


Triplets on the Farm of Gus Riedel, Kalamazoo

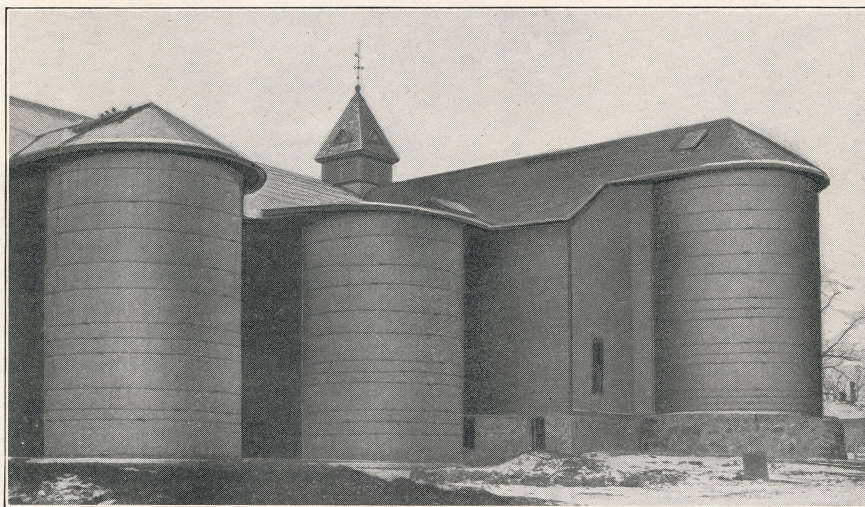
We call these triplets because they are all Kalamazoo Glazed Tile and very nearly alike, altho they are not all exactly the same age. The first one was built in 1915, the next one in '16 and the third one in '17.

This is pretty good evidence that the first Kalamazoo pleased Mr. Riedel so well that nothing else but Kalamazoos would suit him when he needed more silos.

Note that two of these silos have the Kalamazoo steel roof, while the other has a Kalamazoo Asbestos shingle roof. "Kalamazoo all the way through" will give you the kind of silo service you expect to get.

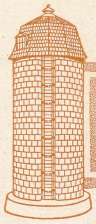


These Three Kalamazoo Silos of California Redwood Were Erected Over 25 Years Ago

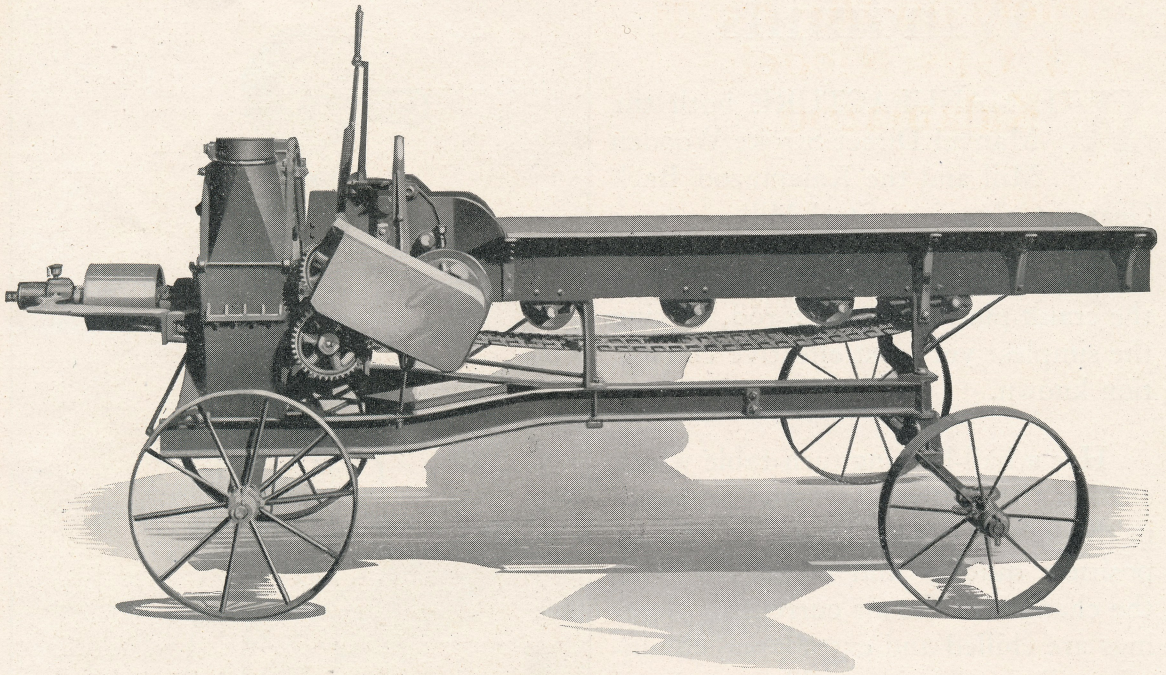
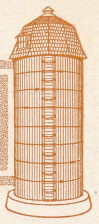


No better evidence of the wonderful longevity of California Redwood could be found than these three silos on the State Hospital Farm, Kalamazoo, Mich. First was built in 1888. After being used 11 years an expert from Iowa Agricultural College reported "Every stave was gone over with a knife and not a soft spot found anywhere. This examination was especially critical near the foundation." These silos are still being used and in good condition, after twenty-six fillings.

In addition to the three silos shown in the picture there are four more Kalamazoo Redwood silos on this same farm.



***Kalamazoo* Tile and Wood Silos**



Kalamazoo Ensilage Cutters

Don't order an ensilage cutter, alfalfa cutter or ensilage-making equipment of any kind before you find out all about the Kalamazoo line.

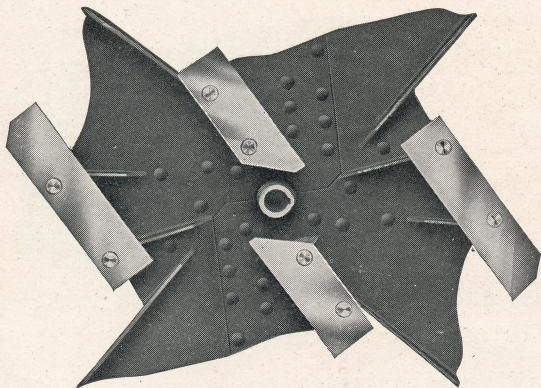
Kalamazoo shear-cut ensilage cutters are known from coast to coast for their simplicity, clean, fast cutting and freedom from trouble. They are the cutters that produce 100% *quality* ensilage.

Ensilage Cutter Catalog mailed upon request—or full information may be obtained from our representative in your locality.

The Famous Kalamazoo Center Shear-cut Knife Head

The only cutting device of the kind on the market. It's the big feature that puts Kalamazoo cutters in a class by themselves. Knives always *shear* toward center of throat. The knifehead is the fly-wheel.

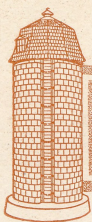
Study carefully the construction of this important and exclusive feature of the Kalamazoo. These fly-wheels are made of malleable iron, interlocked and braced. They are riveted together with hot rivets. The wheels are balanced on a special machine for that purpose, to insure steady, smooth running.



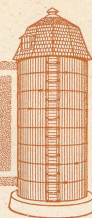
Kalamazoo Knife Head

The fan of these wheels is a part of the wheel and not riveted on. No chance to get loose. The knives are bolted directly to the knife wheel by two heavy, double nutted bolts, and can be quickly and easily removed for sharpening, without destroying their register with the shear plate. The adjustment of the knives on this machine is the fly-wheel itself, which can be moved forward or backward to bring the knives up to the shear bar, thereby adjusting all knives with one operation.

There are many other valuable and "different" features about Kalamazoo Cutters that put them in a class all their own. Be sure to get the Kalamazoo Cutter Catalog before you place your order.



Kalamazoo Tile and Wood Silos



Windmills

WE MANUFACTURE both the Manvel Direct Stroke Wooden Mill and the Kalamazoo Back Geared Galvanized Steel Mill.

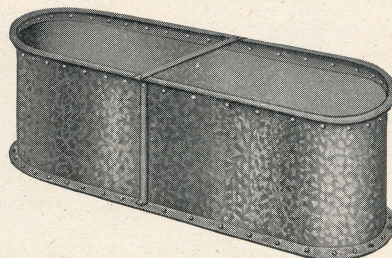
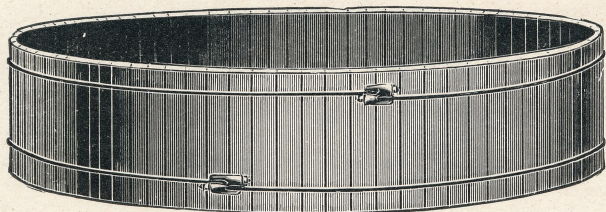
The Manvel operates direct from the crank-pin to the pump-rod, making the simplest yet most effective connection known.

Has a ball-bearing turn-table which enables the Manvel to stand squarely in the face of a light breeze or change position quickly and noiselessly with the changes in the air currents. Bearings are chilled and extra large, eliminating all side friction. The wood sail is fastened without pin, nail or bolt, the fastening being part of the rim itself which is all worked in plain steel and then galvanized under the hot process.

The *Manvel* is the ideal mill for farm use because of its simplicity, great strength and power and smooth running qualities. Ask our representative or write for catalog.



Galvanized Steel and Wood Tanks



We make steel and wood tanks of all sizes and shapes for every farm need—storage tanks—stock watering tanks—as big or as little as you may need.

Write for circular and prices—or ask our representative.

SAVE YOUR CORN

Cold and rainy weather postponed corn planting, delayed cultivation and checked growth.

Corn conditions have slightly bettered since the warm weather but this improvement is too late to insure the bumper crop we need.

Build a silo and save your corn crop. The entire crop may be lost unless you have a silo ready in which to preserve it. Save it from frost or drouth by putting it into the silo.

If so fortunate as to have your corn mature, save the grain for human consumption,—at least part of it—and silo the stalks and leaves.

"Less corn can be fed by many dairymen without reducing milk production, providing they feed more silage and legume hay.

Less corn will be available for feeding the cattle for much more than usual is needed now for human food.

Succulence is just as essential to the cow as to the human being.

Silage provides succulent feed during the winter when pasture is not available.

Silage is palatable and no other feed will combine so well with dry hay and a little grain to produce maximum and economical results."

U. S. Department of Agriculture,

Bulletin July 5th, 1917

Build a Silo-It Will Pay

REFERENCE DEPT.

MAR 2 1993

Kalamazoo Library System

Reasons for the Silo

THE SILO gives from 25% to 30% more feeding value to a corn crop than when it is fed as dry fodder.

THE SILO provides succulent feed in winter which helps to keep the cows healthy and productive when green feeds are lacking and dairy prices are highest.

THE SILO gives insurance against short, drouth-stricken pastures.

THE SILO helps the farmer make the best possible use of frosted corn. Even immature corn can be saved by putting it in the silo.

THE SILO helps in fattening stock for market.

THE SILO furnishes the cheapest form of wintering feed.

THE SILO enables the farmer to feed his stock from less acres.

THE SILO makes possible more acres for grain crops.

THE SILO will can corn, oats, peas, pea-cannery waste, soy beans, clover (if mixed with corn) and sugar beet tops.

THE SILO built this year, will be a permanent, profit producer.

For more information write u. at Lansing, Michigan.

Michigan Food Preparedness Committee

